



UNITED STATES PATENT AND TRADEMARK OFFICE

cen

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-------------------------------|---------------------------|------------------------|
| 10/702,308 | 11/06/2003 | Vladimir Alexandrov Shurbanov | BBNT-P01-071 | 7999 |
| 28120 | 7590 | 10/03/2007 | | |
| ROPES & GRAY LLP PATENT DOCKETING 39/41 ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624 | | | EXAMINER CHO, HONG SOL | |
| | | | ART UNIT 2616 | PAPER NUMBER |
| | | | MAIL DATE 10/03/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/702,308

Applicant(s)

SHURBANOV ET AL.

Examiner

Hong Cho

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-15 and 17-21 is/are allowed.
- 6) ☒ Claim(s) 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on 08/16/2007. Claims 3 and 16 are canceled. Claims 1, 2, 4-15 and 17-25 are pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Gleeson et al (US 5959989), hereinafter referred to as Gleeson, in view of Kim et al (US 7266386), hereinafter referred to as Kim,

Re claims 22 and 24, Gleeson discloses generating a frame (*generating a flood packet*, figure 4a, element 402a), selecting one of intermediate nodes (*one or more relays*, figure 2a, elements 220-223) to distribute a frame (*selecting/identifying one or more of the nodes as a like number of one or more relays*, column 14, lines 26-26), receiving the frame (*receiving the flood packet*) and adding multicast virtual local area network (MVLAN) identifier (ID) (MVLAN ID) to the frame to create a multicast frame (*the*

flood packet with the attached header, figure 4d, element 402d), where the multicast frame is distributed based on MVAN ID (*attaching a header to the flood packet, the header instructing the one or more relays to which of the nodes to send the flood packet*, column 13, lines 63-67), receiving the multicast frame at one of intermediate devices (*sending the flood packet with the attached header to the one or more relays*, column 14, lines 13-16). Gleeson fails to disclose distributing multicast messages in a wireless ad hoc network. Kim discloses performing packet flooding in a wireless ad hoc network (figure 2; column 4, lines 39-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Gleeson to be performed in a wireless network for the benefit of reduced costs of wireless networks in terms of network installation and maintenance.

Re claims 23 and 25, Gleeson discloses an intermediate device receiving a multicast frame (receiving a flood packet at a first one of the nodes, column 14, lines 115-16), stripping off the MVAN ID from the multicast packet (*determining whether the flood packet includes an attached header and extracting the header when the flood packets includes the header*, column 14, lines 23-24), where the multicast frame is distributed based on MVAN ID (*the header identifying one or more second nodes to which the first node is to transmit the flood packet*, column 14, lines 20-23), and transmitting the frame stripped off the MVAN ID to subscribing entities (*retransmitting the flood packets to the one or more second nodes based at least in part on the extracted header*, column 14, lines 23-26). Gleeson fails to disclose distributing multicast messages in a wireless ad hoc network. Kim discloses performing packet flooding in a

wireless ad hoc network (figure 2; column 4, lines 39-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Gleeson to be performed in a wireless network for the benefit of reduced costs of wireless networks in terms of network installation and maintenance.

Allowable Subject Matter

4. Claims 1, 2, 4-15 and 17-21 are allowable.

Response to Arguments

5. Applicant's arguments with respect to claims 22-25 have been considered but are not persuasive.

On the second page of the Remarks, the applicant argues that Gleeson does not disclose flooding wireless packet with a relay configuration. The Examiner respectfully disagrees. Gleeson discloses flooding a packet by distributing a packet with a VLAN ID to members of multicast groups. Gleeson does not disclose distributing multicast messages in a wireless ad hoc network. Kim discloses performing packet flooding in a wireless ad hoc network.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc

Hong Cho
Patent Examiner
9/20/07


9/28/07
WING CHAN
SUPERVISORY PATENT EXAMINER